



U. S. Department  
of Transportation

**Federal Aviation  
Administration**

Great Lakes Region  
Illinois, Indiana, Michigan,  
Minnesota, North Dakota  
Ohio, South Dakota  
Wisconsin

2300 E Devon Avenue  
Des Plaines, Illinois 60018

AUG 15 2003

Mr. Thomas R. Walker, Commissioner  
Department of Aviation  
Chicago O'Hare International Airport  
P.O. Box 66142, Terminal 2 City Office  
Chicago, IL 60666

Dear Mr. Walker:

Chicago O'Hare International Airport  
Chicago, Illinois  
AIP Project No. 3-17-0022-56  
Grant Offer

Enclosed herewith are the original and three copies of the Grant Offer issued by the authority of the Administrator of the Federal Aviation Administration on behalf of the United States to pay the Government's share of the allowable costs up to a maximum of \$10,296,294.00 for a project at Chicago O'Hare International Airport, under AIP Project No. 3-17-0022-56.

If the terms of the Grant Offer are satisfactory, it must be accepted by the sponsor on or before August 29, 2003, and such acceptance should be accomplished by execution of the paragraph entitled "Acceptance" by the officers of the sponsor who have been duly authorized to take such action. The respective certificate of the sponsors' attorneys should be executed following the execution of the above-mentioned documents. Please return the original and two copies to this office.

The Grant Offer and the executed Acceptance thereof will together constitute the Grant Agreement under which the sponsor is obligated to accomplish the development described therein. The obligations created under the Grant Agreement shall not be modified in any method other than through written approval of the Federal Aviation Administration. At no time should the City of Chicago or their representatives, anticipate any change of any nature under the Grant Agreement, and any deviation from strict compliance therewith for any reason or on any basis without such written approval shall be made at the sponsor's own risk.

Sincerely,

  
Philip M. Smithmeyer  
Manager, Chicago Airports District Office

Enclosures



U. S. Department of Transportation  
Federal Aviation Administration

## GRANT AGREEMENT

Date of Offer: **AUG 15 2003**  
Project Number: 3-17-0022-56

Recipient: The City of Chicago (Herein called the "Sponsor")  
Airport: Chicago O'Hare International Airport

### OFFER

THE FEDERAL AVIATION ADMINISTRATION, FOR AND ON BEHALF OF THE UNITED STATES, HEREBY OFFERS AND AGREES to pay, as the United States' share, seventy-five percent (75%) of the allowable costs incurred in accomplishing the project consisting of the following:

"Airport Master Plan Study, Phase II, in support of the on-going planning and Environmental Impact Statement processes for the O'Hare Modernization Program as outlined in the attached Statement of Work dated August 12, 2003," all as more particularly described in the Project Application dated September 6, 2002.

The maximum obligation of the United States payable under this Offer shall be \$10,286,294.00 for airport planning.

This offer is made in accordance with and for the purpose of carrying out the provisions of Title 49, United States Code, herein called Title 49 U.S.C. Acceptance and execution of this offer shall comprise a Grant Agreement, as provided by Title 49 U.S.C., constituting the contractual obligations and rights of the United States and the Sponsor.

UNITED STATES OF AMERICA  
FEDERAL AVIATION ADMINISTRATION

  
Manager, Chicago Airports District Office

### ACCEPTANCE

The Sponsor agrees to accomplish the project in compliance with the terms and conditions contained herein, in the Project Application, and in the January 2001 "Terms and Conditions of Accepting Airport Improvement Program Grants" signed on June 5, 2001.

Executed this 18th day of August, 2003

  
Signature of Sponsor's Designated Official Representative

(Seal)

Commissioner of Aviation  
Title

### CERTIFICATE OF SPONSOR'S ATTORNEY

I, \_\_\_\_\_, acting as Attorney for the Sponsor do hereby certify: That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Illinois. Further, I have examined the foregoing Grant Agreement, and the actions taken by said Sponsor relating thereto, and find that the acceptance thereof by said Sponsor and Sponsor's official representative has been duly authorized and that the execution thereof is in all respects due and proper and in accordance with the laws of the said State and Title 49 U.S.C. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

Signature of Sponsor's Attorney

Executed this \_\_\_\_ day of \_\_\_\_\_, 2003



U. S. Department of Transportation  
Federal Aviation Administration

## GRANT AGREEMENT

Date of Offer: **AUG 15 2003**  
Project Number: 3-17-0022-56

Recipient: The City of Chicago (Herein called the "Sponsor")  
Airport: Chicago O'Hare International Airport

### OFFER

THE FEDERAL AVIATION ADMINISTRATION, FOR AND ON BEHALF OF THE UNITED STATES, HEREBY OFFERS AND AGREES to pay, as the United States' share, seventy-five percent (75%) of the allowable costs incurred in accomplishing the project consisting of the following:

"Airport Master Plan Study, Phase II, in support of the on-going planning and Environmental Impact Statement processes for the O'Hare Modernization Program as outlined in the attached Statement of Work dated August 12, 2003," all as more particularly described in the Project Application dated September 6, 2002.

The maximum obligation of the United States payable under this Offer shall be \$10,296,294.00 for airport planning.

This offer is made in accordance with and for the purpose of carrying out the provisions of Title 49, United States Code, herein called Title 49 U.S.C. Acceptance and execution of this offer shall comprise a Grant Agreement, as provided by Title 49 U.S.C., constituting the contractual obligations and rights of the United States and the Sponsor.

UNITED STATES OF AMERICA  
FEDERAL AVIATION ADMINISTRATION

  
Manager, Chicago Airports District Office

### ACCEPTANCE

The Sponsor agrees to accomplish the project in compliance with the terms and conditions contained herein, in the Project Application, and in the January 2001 "Terms and Conditions of Accepting Airport Improvement Program Grants" signed on June 5, 2001.

Executed this \_\_\_\_ day of \_\_\_\_\_, 2003

\_\_\_\_\_  
Signature of Sponsor's Designated Official Representative

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
Title

### CERTIFICATE OF SPONSOR'S ATTORNEY

I, \_\_\_\_\_, acting as Attorney for the Sponsor do hereby certify: That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Illinois. Further, I have examined the foregoing Grant Agreement, and the actions taken by said Sponsor relating thereto, and find that the acceptance thereof by said Sponsor and Sponsor's official representative has been duly authorized and that the execution thereof is in all respects due and proper and in accordance with the laws of the said State and Title 49 U.S.C. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

\_\_\_\_\_  
Signature of Sponsor's Attorney

Executed this \_\_\_\_ day of \_\_\_\_\_, 2003

APPLICATION FOR  
FEDERAL ASSISTANCE

TYPE OF SUBMISSION: Construction <input checked="" type="checkbox"/> Non-Construction Preapplication <input checked="" type="checkbox"/> Non-Construction		1. DATE SUBMITTED	Applicant Identifier
		2. DATE RECEIVED BY STATE	State Application Identifier
		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

3. APPLICANT INFORMATION	
Legal Name: <u>City of Chicago</u>	Organizational Unit: <u>Department of Aviation</u>
Address (give city, county, state, and zip code):  <u>P.O. Box 66142</u> <u>Chicago, IL 60666</u>	Name and telephone number of the person to be contacted on matters involving this application (give area code):  <u>Daryl McNabb</u> <u>(773) 686-3537</u>

6. EMPLOYER IDENTIFICATION NUMBER (EIN): <div style="border: 1px solid black; padding: 2px; display: inline-block;">3 6 — 6 0 0 5 8 2 0</div>		7. TYPE OF APPLICANT: (enter appropriate letter in box) <input checked="" type="checkbox"/> A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify): _____
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es): <input type="checkbox"/> <input type="checkbox"/> A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify): _____		
9. NAME OF FEDERAL AGENCY: <u>Department of Transportation</u> <u>Federal Aviation Administration</u>		

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: <div style="border: 1px solid black; padding: 2px; display: inline-block;">2 0 — 1 0 6</div>		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: <u>Runway 4L/22R &amp; Taxiway C Rehabilitation (H612)</u> <u>Taxiway A/B Relocation (WH6104)</u> <u>T6 Apron and Taxilanes-Beyond 80 Feet (WH6100)</u> <u>Master Plan - Phase 2 (H0065-02)</u> <u>Stop Bar Lighting at 5 Runway Locations (TBD)</u> <u>Hangar Ramp Area Service Road Construction (TBD)</u>
TITLE: <u>Airport Improvement Program</u>		
AREAS AFFECTED BY PROJECT (cities, counties, states, etc.):  <u>Chicago Metropolitan Area</u>		

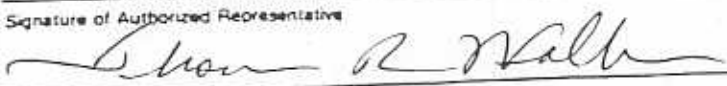
  

13. PROPOSED PROJECT:		14. CONGRESSIONAL DISTRICTS OF:	
Start Date	Ending Date	a. Applicant	b. Project
<u>1/03</u>	<u>12/03</u>	<u>City-wide</u>	<u>City-wide</u>

15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? a. YES THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE: _____ b. NO <input checked="" type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW
a. Federal	\$ <u>89,247,000</u> .00	
b. Applicant	\$ <u>29,749,000</u> .00	
c. State	\$ _____ .00	
d. Local	\$ _____ .00	
e. Other	\$ _____ .00	
f. Program Income		17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes * If "Yes," attach an explanation. <input checked="" type="checkbox"/> No
g. TOTAL		
\$ <u>118,996,000</u> .00		

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN ONLY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED		
a. Typed Name of Authorized Representative <u>Thomas R. Walker</u>	b. Title <u>Commissioner of Aviation</u>	c. Telephone number <u>(773) 686-8060</u>
Signature of Authorized Representative 		d. Date Signed <u>9/6/02</u>

\*Section 18, Items a-e

CERTIFYING REPRESENTATIVE:

The state supports this application from the City of Chicago for Chicago O'Hare Airport for federal funding. The project request for Runway 4L/22R & Taxiway C Rehab(H6121), Taxiway A/B Relocation (WH6104), T6 Apron & Taxiways-Beyond 80 feet (WH6100), Master Plan-Phase 2 (H0065-02), Stop Bar Lighting at 5 Runway Locations, Hangar Ramp Area Service Road Construction and follows the listing as contained in the Department's Proposed FY 2003-2007 AIP.



Hugh Van Voorst, Director  
Division of Aeronautics  
Illinois Dept. of Transportation

DEC 02 2002

Date Signed

**Chicago O'Hare International Airport  
Application for Federal Assistance  
AIP #3-17-0022-56**

**O'Hare Modernization Program (OMP) Formulation**

Estimated Total Cost: \$13,728,392

Planning Start: 01/01/03

Planning Complete: 12/31/03

SCOPE: This project has been further defined in a Statement of Work dated August 12, 2003 (attached).

## I. Introduction

This is the statement of work, dated August 12, 2003, for the services to be provided under the Federal Aviation Administration's (FAA's) Airport Improvement Program (AIP) grant #3-17-0022-56. This work will be performed in support of the on-going planning and Environmental Impact Statement (EIS) processes for the O'Hare Modernization Program (OMP).

The OMP proposes the reconfiguration of the airfield to provide significant delay reduction and capacity enhancement. This program proposes the development of a new runway in the east-west orientation and the relocation of three existing runways to an east-west orientation. This Program would ultimately provide six parallel east-west runways, a new western terminal complex, and a new roadway entrance from the west side of the airport.

The following task descriptions generally describe the proposed work scope to be covered by this AIP grant. Refined scopes may be provided as these services are contracted by the City of Chicago with the respective consultants. For purposes of this document, CCT refers to the City's Consulting Team, while FAA/TPC refers to the FAA and their Third Party Contractor.

The following table identifies the four primary areas applicable to this AIP Grant.

Estimated Allocation of Funds	
Preparation of EIS - TPC	\$7.0 million
Technical Environmental Consulting by CCT	\$3.3 million
Airfield/Airspace Simulation	\$2.0 million
Surface Transportation Planning	\$1.5 million
<b>TOTAL</b>	<b>\$13.8 million</b>

**Estimated Schedule:** Payments under this grant are only for work to be conducted after the award of the grant which is generally expected to be awarded on August 15, 2003. For tasks which have been partially completed prior to the date of the award, the City will take all necessary steps to ensure that only work performed after the date of award is covered by the grant.

## II. Preparation of Environmental Impact Statement (EIS) - TPC

The primary focus of the EIS study is to identify the impacts of the following development projects:

- Construction of one new Runway and associated taxiways:
  1. North East-West Runway (ultimate Runway 9L/27R)
- Realignment of three existing runways and associated taxiways:



1. Closely-spaced runway on north airfield (ultimate Runway 9C/27C)
  2. Decommissioning of Existing Runway 18/36
  3. Closely-spaced runway on south airfield (ultimate Runway 10C/28C)
  4. Decommissioning of Existing Runway 14L/32R
  5. South east-west runway (ultimate Runway 10R/28L)
  6. Decommissioning of Existing Runway 14R/32L
- Extension of existing Runway 9L/27R (ultimate Runway 9R/27L) and associated taxiways
  - Extension of existing Runway 9R/27L (ultimate Runway 10L/28R) and associated taxiways
  - Terminal development on west airfield and associated on-airport roadway networks
  - Accommodation of western access to the Airport
  - Relocation of existing Union Pacific Railroad in south airfield as necessitated by the new western access and/or the runway realignment alternatives
  - Relocation of Irving Park Road and on-airport roadways
  - Relocation/development of miscellaneous airport user and support facilities
  - Relocation of miscellaneous on/off airport utilities
  - Relocation/reconfiguration of Willow-Higgins Creek and Bensenville Ditch
  - Relocation/development of on-airport storm water detention basins
  - Relocation of existing cemeteries (St. Johannes and Resthaven)
  - Installation/relocation of approach light systems
  - Installation, removal, or relocation of navigational aids on- and off-airport
  - Construction of a new Air Traffic Control Tower(s)
  - Identification of changes to air traffic procedures and airspace structure
  - Identification of changes to approach procedures
  - Land acquisition in areas northwest and southwest of existing O'Hare boundary
  - Other issues as they may arise

In addition, the EIS must also address the potential for cumulative environmental impacts of other on-going or related improvements to O'Hare. Cumulative impacts may potentially include ongoing and future development in the vicinity of O'Hare and within the Greater Chicago Metropolitan Area.

The analysis must conform to and be processed in a manner consistent with applicable federal, state, regional and local statutes, regulations, and guidelines. The analysis must be conducted in accordance with Federal Aviation Administration Order 5050.4A, *Airport Environmental Handbook*, and FAA Order 1050.1D, *Policies and Procedures for Considering Environmental Impacts*, as updated. This Scope of Services is written in a form that generally parallels these orders. The final products must conform to the National Environmental Policy Act ("NEPA") (42 USC 423) et. Seq.; Council on Environmental Quality ("CEQ") regulations (40 CFR Parts 1500-1508); and applicable Department of Transportation ("DOT") Orders, FAA Orders, Federal Laws (i.e. Clean Air Act, Clean Water Act, etc.); State of Illinois Laws; and the Memorandum of Understanding between FAA and the City.



The estimated allocation for this element is \$7,000,000.

**Task 1 – Project Mobilization Activities (completed)**

**Task 2 – Federal Scoping Activities (completed)**

**Task 3 – Determination of Purpose and Need**

The TPC will evaluate and document the purpose and need for the proposed re-configuration of O'Hare runways and associated facilities in this task. The project's purpose and need will form the basis of the alternative analysis, and the ability of all reasonable alternatives to meet the stated purpose and need must be carefully examined and thoroughly assessed.

**Task 4 – Alternatives Analysis**

In this task, the TPC will address alternatives to the proposed action. To meet the spirit and intent of the NEPA and CEQ regulations, the alternatives considered must be in response to and consistent with the project purpose and need. Therefore, a reasonable range of alternatives that will meet the need will be identified. The project purpose and need will form the basis of the alternatives analysis outlined in this task.

**Task 5 – Affected Environment**

As required by the FAA Orders 5050.4A and 1050.1D, as updated, NEPA, and CEQ, the TPC will review information provided by CCT and prepare a concise description of the affected environment. This task will describe Airport environs, which will be considered to include those areas that, as a result of airport improvements, may be: 1) affected by construction activity, 2) exposed to significant levels of aircraft noise (65 DNL and greater); 3) exposed to noise levels above the 60 DNL and below 65 DNL as determined by a noise impact analysis conducted in accordance with Federal Interagency Committee of Noise ("FICON") requirements; 4) impacts to other environmental resources; 5) affected by residential or commercial relocation; or 6) affected by changes in surface transportation patterns.

**Task 6 – Environmental Consequences**

This task will involve the TPC technical analyses of the direct, indirect, and cumulative environmental effects of the proposed improvements and other reasonable alternatives for specific impact categories listed in FAA Orders 5050.4A and 1050.1D, as updated.

**Task 7 – Draft Report Preparation**

The TPC will be responsible for preparing, printing and distribution of the Preliminary Draft EIS and Draft EIS.

**Task 8 – Public Involvement**

The TPC, in coordination with the FAA, will develop and implement an extensive public involvement program to allow interested agencies, groups, and individuals, ample opportunity to review and comment on the study.

**Task 9 – Final EIS Report Preparation**

The FAA will prepare the Final EIS with assistance from the TPC and will take responsibility for its scope and content. This includes preparation of response to comments and revision of the Draft EIS. Subsequent to this, the TPC will aid the FAA in the preparation of the Final EIS.

**Task 10 – Section 404 Permit Activities (Wetlands)**

Information needed for the development of a Federal 404 permit pursuant to 33 CFR Parts 320 through 330 will be collected and/or developed, and compiled into a formal permit application. Throughout the EIS process, additional coordination will be required with the FAA, TPC, CCT and all of the various regulatory agencies for the required permits. Ultimately, the TPC will incorporate this information into the EIS.

**Task 11 – Environmental Due Diligence Audits (Hazardous Waste)**

Planned improvements to O'Hare require the acquisition and possible remediation of adjacent properties. FAA Orders 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*, August 22, 1994, will be reviewed by the TPC in order to assure that any property acquisition is consistent with this guidance, and that potential environmental liabilities have been adequately identified and addressed.

**Task 12 – Project Management**

In this task, the TPC will provide the day-to-day coordination and management of the EIS. It includes monthly project progress report preparation, meeting minutes preparation, subcontractor coordination, FAA and City coordination, schedule monitoring, task order preparation, MBE/WBE oversight/coordination, invoicing, cost control, and project close-out procedures. The TPC will arrange and participate in scheduled/periodic/monthly meetings during the conduct of the EIS. Work products for this task will include meeting minutes, project schedules, status reports, etc.

**Task 13 – Assist with Draft Record of Decision/Record of Approval Preparation**

FAA will prepare and issue the FAA Record of Decision ("ROD"). The TPC, as directed by the FAA, shall provide FAA with 500 printed/bound copies of the Record of Decision, and copies of the full text of the ROD on computer disks in both the "html" and "pdf" formats. Finally, TPC will assist the FAA with distribution of the Final EIS and the ROD.

**Task 14 – Processing FAA Freedom of Information Act ("FOIA") Requests**

The TPC will assist the FAA in processing Freedom of Information Act ("FOIA") requests and requests for the information associated with potential litigation.

**Task 15 – Assemble and Document Record and Index**

The TPC will establish and maintain a Project Filing System ("PFS") to facilitate coordination and eventual preparation of the Administrative Record ("AR"). It will consist of a complete, well-organized, standardized database of each document and three copies of all documents relating to the EIS to be used by the FAA in its decision-making process (Record of Decision).

### **III. Technical Environmental Consulting - CCT**

These tasks will ensure that development of the Technical Working Reports by the CCT and other technical analyses are technically sound (e.g., technically accurate, appropriate, and complete), and are consistent with respect to the objectives and scope of this Program.

This task involves coordination and assistance efforts with the TPC and appropriate agencies in areas of noise and air quality analyses, as well as actual creation of noise analysis input files, as well as development of Best Management Practices for air quality emissions reduction efforts, in support of the EIS.

Finally, this task involves the development of information relative to the affected environment for inclusion in a Technical Working Report for submission to the FAA and TPC for consideration.

The estimated allocation for this element is \$3,300,000.

#### **Task 1 – Technical Liaison Team**

The Technical Liaison Team will serve as the primary technical coordinators for the various CCT members charged with the preparation and review of the Technical Working Reports, and other technical analyses. This task involves the direct coordination of the preparation and internal review of the required technical analysis, as well as review by FAA and TPC.

#### **Task 2 - Air Quality Coordination**

This task is required to develop an understanding of the potential air quality impacts and health effects of the OMP, which will comply with the National Environmental Policy Act (NEPA) and other applicable laws and regulations. This task includes assisting in the analysis, development and production of an Air Quality Technical Working Report.

##### **Task 2.1 – Develop Coordination Plan**

The CCT will develop a coordination plan that will annotate necessary relationships between Program Team members and external parties in order to successfully complete the air quality analysis.

##### **Task 2.2 – Agency Coordination on Air Quality Issues**

CCT will coordinate with the appropriate federal, state, and local air quality agencies to develop a strategic plan for final study approval. A timeline will be developed for preparing and reviewing the air quality methodology and protocol. Coordination with key agencies will be on-going throughout the entire EIS process.

##### **Task 2.3 – Air Quality Protocol Assistance**

The CCT will assist in the assembly of an air quality protocol that identifies the assumptions, methodologies, data sources, and air quality models to be used in conducting the air quality impact analyses for the OMP. The protocol will include agency requirements based on scoping and coordination meetings. As the air quality

analysis progresses, the protocols will be revised to reflect the new information and the results of the analyses.

**Task 2.4 – Update Baseline Condition**

The CCT will assist the TPC to accurately quantify air quality impacts for the OMP Baseline Condition.

**Task 2.5 – Coordinate Air Quality Input Data and Analysis**

The CCT will work with TPC to ensure that the modeling input information, assumptions, background data, methodology, data transfer, and processing of project detail are efficient and complete. The modeling process and deliverables are defined in the air quality protocols.

**Task 2.6 – Alternatives Air Quality Evaluation**

As requested, the CCT will provide detailed screening evaluations of alternatives to assess air quality impacts.

**Task 3 – OMP Air Quality Best Management Practices (BMPs)**

During the Agency Scoping meetings, the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) requested a demonstration of air quality best management practices (BMPs) that will be implemented concurrently with the planning and development of the OMP, as well as a description of the existing air quality BMPs already in place at the Airport. The USEPA and IEPA suggested that the air quality BMPs utilize best available technology and common sense initiatives to reduce Airport emissions during the construction phases of OMP, provide for permanent operational emission reductions from the use of clean-burning fuels for airport fleet vehicles, and expedite airport emission reductions ahead of regulatory mandates. These Agencies requested that the air quality BMPs be included in the Federal Aviation Administration's (FAA) Environmental Impact Statement (EIS).

**Task 3.1 – Assemble Strategic Air Quality Best Management Practices Document**

The following tasks described below will be documented in one comprehensive volume. The volume will describe and summarize emission savings and approximate financial obligations from existing air quality improvement measures as well as future air quality practices. The appendices of this document will include the technical and financial information supporting the air quality BMPs.

**Task 3.2 - Revise the 1998 Air Quality Improvement Program (AQIP) Report for Existing Conditions**

The 1998 version of the AQIP highlights the emission savings from existing air quality improvement aspects of O'Hare. Namely, emissions saved from mass transit improvements, the Airport Transit System (ATS), terminal core improvements, airside improvements, existing clean-fueled fleet vehicles, and other miscellaneous air quality efforts. The activities of this task are intended to update the AQIP report to reflect OMP Baseline conditions.



**Task 3.3 – Clean Fuel Options for Airport Vehicles**

In order to meet the requests of the USEPA and IEPA, a detailed vehicle inventory including ground support equipment (GSE) and ground access vehicles (GAV) will be performed. This inventory will establish the baseline of airport-wide vehicle fuel usage and vehicle emission reductions from the implementation of alternative fuels programs for O'Hare's tenants, vendors, and the Chicago DOA vehicle fleet.

**Task 3.4 – Clean Construction Options**

The CCT will assist in identifying clean fuels and emission reduction technology that will reduce emissions from diesel construction activities. The options will be presented in a manner which builds from a baseline of using regular diesel fuel in non-Tier compliant engines with no control options, and then steps up the emission savings options as follows:

- Using non-Tier compliant engines with ultra low sulfur diesel (ULSD)
- Using Tier compliant engines with regular diesel
- Using Tier compliant engines with ULSD
- Using Tier compliant engines with ULSD and feasible control technologies (i.e., particulate filters and catalytic oxidizers)

For each option above, the approximate benefits/costs analysis, technical aspects, and emission savings will be summarized and presented for discussion and consideration. The resultant choice will be communicated to the FAA/TPC for inclusion in the air quality portions of the EIS as part of the demonstration of air quality BMPs.

**Task 4 – OMP Affected Environment Technical Working Report**

This task is required to describe the affected environment for the Project to enable subsequent impact analysis for compliance with applicable Federal laws and regulations.

The task objective is for the CCT to produce a description of the affected environment that would be suitable for submission to FAA for use in an Environmental Impact Statement (EIS) for the Project. The resulting Technical Working Report will provide a satisfactory foundation for environmental impact analyses to be conducted in compliance with the National Environmental Policy Act (NEPA) (42 USC 4231 et seq.); the FAA Orders implementing NEPA (Order 5050.4A, *Airport Environmental Handbook*, and Order 1050.1D, *Policies and Procedures for Considering Environmental Impacts*, as updated); Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508); and other applicable laws and regulations.

**Task 4.1 – Study Area Definition**

In consultation with the FAA and TPC, the study area(s) will be defined.

**Task 4.2 – Land Use Mapping**

The CCT will prepare existing land use and zoning maps for the study area. This updated information will be reflected on appropriate base maps.

**Task 4.3 – Natural Environment Description**

The CCT will summarize the following in the within the study area: surface transportation, floodplains, wetlands, water quality, biotic communities & threatened endangered species, air quality, solid waste and hazardous materials and coastal zone management.

**Task 4.4 – Historic Resources Description**

The CCT will describe historic, architectural, archaeological, and cultural resources in the study area.

**Task 4.5 – Socioeconomic Profile**

The CCT will collect the information needed to provide an overview of the demographic and economic conditions in the metropolitan area. Detailed information on the population within the study area is needed to determine whether any adverse impacts would result from the Project with emphasis on low-income people or minorities.

**Task 4.6 – Prepare Technical Working Report**

The CCT will develop a Technical Working Report for submittal to the FAA and TPC, reporting results of analyses.

**Task 5 – Noise Analysis Support**

This task involves CCT assistance in coordinating preliminary information and data for the OMP noise analysis. The primary objective of this task is to provide coordination and review of preliminary information related to noise exposure analysis to be conducted by the FAA and TPC.

**Task 5.1 – Existing Conditions Evaluation**

The CCT will collect current Airport Noise Monitoring System (ANMS) data. The CCT will conduct comparisons to identify similarities and/or differences from the existing noise contour, and conduct analysis to quantify significance of differences if warranted. The CCT will prepare a summary paper on the findings of this analysis.

**Task 5.2 – Noise Modeling Protocol Development**

This task involves CCT efforts to establish an acceptable Noise Modeling Protocol for developing input data and calculating noise levels. The objective is to obtain acceptance by the FAA for use of this protocol to meet the EIS requirements. Information related to specific future years and project alternatives will not be required in the protocol description. The primary goal of this task will be to determine which models are to be used, the versions of each model to be used, the primary data to be utilized, and a general overview on how the data will be processed.

**Task 5.3 – Coordination of Data Transfer to Noise Model**

This task involves CCT review to ensure that Total Airspace and Airport Modeller (TAAM) output files reasonably represent a projected average annual day (AAD) for each scenario studied. Coordination efforts will focus on key input elements such as flight tracks, runway use assignments, fleet mix, and day/night distribution for each scenario.



**Task 5.4 – Initial Data Collection**

This task will involve CCT preliminary collection and review of data required for noise analysis by the FAA TPC. The CCT will collect information on existing and forecasted aircraft ground run-ups. The CCT will also review Integrated Noise Model (INM) flight tracks and flight profiles developed for the O'Hare 2000 Noise Contour, extending them where necessary to meet the requirements of FAA Notice 7210.360, "Air Traffic Noise Screening Above 3,000 feet AGL." A package of data and materials will be provided to the FAA and TPC for their review and consideration.

**Task 5.5 – Assistance to FAA TPC**

The CCT will provide assistance, upon request, to the FAA TPC in all phases of the noise analyses. Major areas that may require assistance are the development and review of input data for each alternative and scenario. The primary objective for the CCT will be to share its long-term experience at the Airport with the FAA TPC. The CCT will also ensure consistency with the noise modeling protocol.

**Task 5.6 – Assistance to Alternative Development**

The CCT will provide assistance in conducting noise analysis screening and sensitivity analysis for proposed alternatives and altered assumptions. Screening and sensitivity assessments may be limited based on available data. This task will provide initial screening results to assist during the alternative development phase. The results will not replace detailed analysis required under the NEPA.

**Task 6 – OMP Noise Modeling Input Development**

The development of OMP is expected to result in significant changes in noise exposure in the Study Area. This task includes CCT support with direct coordination related to the FAA and TPC noise modeling efforts in support of the EIS. Coordination may involve direct involvement in input development as well as providing concurrence to all modeling assumptions.

**Task 6.1 – Existing Conditions Evaluation**

The CCT will develop the Existing Conditions noise contour that will be utilized by the FAA for the OMP EIS. The CCT will coordinate with the TPC to review methodology, input data and results.

**Task 6.2 – Future No Action Data Development**

This task involves the CCT application of future No Action TAAM data to adjust Existing Conditions input as necessary, and assign future scheduled events to the adjusted structure. The final product of this task will be a set of INM input files for FAA TPC use for each of the no-action years of analysis.

**Task 6.3 – Future Proposed Action Noise Input Review and Concurrence**

This task involves a procedure that will ensure an accurate review and establish consensus with the TPC's future Proposed Action noise analysis methodology, input assumptions and output results. The results of this task will be reviewed and reconciled

with the TPC and their assumptions. The TPC will be responsible for final input to be used by the OMP EIS.

**Task 7 – Other Support (as needed)**

Throughout the course of the planning and the development of the EIS, additional technical support may be required. This may include the need to supplement on-going analyses with additional support or additional Technical Working Reports from CCT members, as the work progresses and additional alternatives or technical analysis is required.

**IV. Airfield/Airspace Simulation**

In accordance with planning and environmental analyses associated with the OMP, airfield and airspace simulation of baseline configurations and potential future concepts will be performed utilizing the TAAM simulation model. This simulation of future conditions will generally follow the desired concept layouts as determined by other planning processes. The following tasks generally describe the tasks to be included.

The estimated allocation for this element is \$2,000,000.

**Task 1 – Experiment Design**

An experiment design will be developed by the CCT for the baseline and future simulation experiments in support of the EIS. This design will define runway use, operating configurations, weather conditions, demand levels, and other associated details for each simulation experiment.

**Task 2 – Baseline and Future Schedules**

Schedules for aeronautical activity will be developed by the CCT based on the Planning Activity Levels (PALs) that are defined through other planning analysis. These schedules will be used as inputs for future simulation experiments.

**Task 3 – Baseline and Future Simulation**

Based on input from the FAA on airfield and airspace design and operating procedures, a TAAM model will be developed by the CCT to simulate the desired simulation concepts. This model will focus on airspace structure, airfield layouts, and operating parameters. Future experiments will be performed to produce desired performance analysis.

**Task 4 – Evaluation of Simulation Results**

Based on the simulation experiments that are performed, evaluations of experiment results will be performed to analyze each baseline and future concept.

**Task 5 – Documentation**

A discussion outline will be prepared that presents methodologies, assumptions, calibration conclusions, and findings.

**V. Surface Transportation Planning**

The estimated allocation for this element is \$1,500,000.

**Task 1 – Project Definition**

The CCT will develop surface transportation components for OMP project definition phase and include as a Technical Working Report. Prepare surface transportation concepts (primarily roadways, parking, and curb front) for the OMP. Integrate these concepts into the airfield, terminal, and support/cargo elements of the program. Work with the city and local transportation agencies (especially IDOT) to integrate local and regional transportation improvements. Work with other members of the team to integrate railroad and people mover concepts.

**Task 2 – Surface Transportation Analysis**

The CCT will evaluate the surface transportation system alternatives for the OMP. This will include the measures of effectiveness for no action and build conditions for the future year alternatives.

**Task 2.1 - Develop surface transportation components for the alternatives**

The CCT will develop the detailed components for the activity scenarios that will be evaluated. These components will be based on the alternatives developed in the project definition phase. This task will require close interaction with the rest of the project team.

**Task 2.2 - Refine the methodology for the surface transportation analysis**

The proposed methodology for the surface transportation analysis will be refined by the CCT based on the final requirements for the input to the air quality and noise analysis and on the final outline for the surface transportation chapter.

**Task 2.3 - Modify the surface transportation model based on Task 2.2**

The CCT will perform the modifications to the surface transportation model to address the most current needs of the Project.

**Task 2.4 - Apply surface transportation model to the future activity scenarios**

The CCT will code the surface transportation networks for the future scenarios; generate, distribute, and assign the trips.

**Task 2.5 – Agency Coordination**

The CCT, in conjunction with the FAA and TPC will coordinate with various Federal, State and local agencies, including FHWA, FTA, IDOT, NIPC, CATS, Cook and DuPage Counties.



U. S. Department  
of Transportation

**Federal Aviation  
Administration**

**AUG 15 2003**

Mr. Thomas R. Walker, Commissioner  
Department of Aviation  
Chicago O'Hare International Airport  
P.O. Box 66142, Terminal 2 City Office  
Chicago, IL 60666

Dear Mr. Walker:

Chicago O'Hare International Airport  
Chicago, Illinois  
AIP Project No. 3-17-0022-56  
Grant Offer

Enclosed herewith are the original and three copies of the Grant Offer issued by the authority of the Administrator of the Federal Aviation Administration on behalf of the United States to pay the Government's share of the allowable costs up to a maximum of \$10,296,294.00 for a project at Chicago O'Hare International Airport, under AIP Project No. 3-17-0022-56.

If the terms of the Grant Offer are satisfactory, it must be accepted by the sponsor on or before August 29, 2003, and such acceptance should be accomplished by execution of the paragraph entitled "Acceptance" by the officers of the sponsor who have been duly authorized to take such action. The respective certificate of the sponsors' attorneys should be executed following the execution of the above-mentioned documents. Please return the original and two copies to this office.

The Grant Offer and the executed Acceptance thereof will together constitute the Grant Agreement under which the sponsor is obligated to accomplish the development described therein. The obligations created under the Grant Agreement shall not be modified in any method other than through written approval of the Federal Aviation Administration. At no time should the City of Chicago or their representatives, anticipate any change of any nature under the Grant Agreement, and any deviation from strict compliance therewith for any reason or on any basis without such written approval shall be made at the sponsor's own risk.

Sincerely,

**ORIGINAL SIGNED BY**

Philip M. Smithmeyer  
Manager, Chicago Airports District Office

Enclosures

Great Lakes Region  
Illinois, Indiana, Michigan,  
Minnesota, North Dakota  
Ohio, South Dakota  
Wisconsin

2300 E Devon Avenue  
Des Plaines, Illinois 60018

CONCURRENCES

ROUTING SYMBOL

CH1-6005

INITIALS/SIGNATURE

9/5/03

DATE

8/15/03

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE

ROUTING SYMBOL

INITIALS/SIGNATURE

DATE